

Background

The HMDS V1 Trainer was initiated by the Joint IED Defeat Organization (JIEDDO) and the U.S. Army Forces Command (FORSCOM) as a cost effective training kit for the Husky Mounted Detection System (HMDS).

The Base Husky Vehicle Mounted Mine Detector (VMMD) utilizes metal detectors to find metallic mines. The HMDS (Tactical) was developed utilizing ground penetrating radar to detect any buried threat and provide critical information about the location and depth of the threat. Portions of the high-tech equipment extend well beyond the vehicle and present difficulties in operation leading to expensive repairs. ECBC Engineering Directorate's Advanced Design and Manufacturing (ADM) Division was tasked to develop a trainer in order to minimize costs to damaged equipment during training; to include a physical component closely resembling the actual system along with a software package similar in operation but modified to work with Radio Frequency Identification (RFID) tags and Global Positioning System (GPS) integration.

HMDS-T V1 Trainer



Trainer Graphical User Interface



Strategy

ADM worked with Product Manager Counter Explosive Hazard (PdM CEH) and Mission Support Center of Excellence (MSCoE) to integrate the operation and look of the Tactical HMDS Graphic Use Interface (GUI). Utilizing real world data collected in theater and training stations, ADM was able to simulate a detailed and accurate detection simulator.

Testing at White Sands Missile Range proved the system to be an 85% solution for driver training of the HMDS Tactical system. Training stations across the US and in Germany have been using the HMDS V1 Trainer to minimize training times on the Tactical systems which has greatly reduced costs for maintenance and repairs.

ADM is continuing the enhancement of the system enable collective training. Program Executive Office for Simulation, Training and Instrumentation (PEO STRI) and PdM CEH are in the process of turning the HMDS V1 Trainer into a Program of Record (PoR) asset.

Stakeholders

Program Manager: PdM CEH
Program Integrator: PEO STRI
HMDS-T Material Developer: ADM
Subject Matter Expert (SME): MSCoE

Goals/Milestones

Jan 2012: Develop and Deliver 26 Trainers
Apr 2012: Familiarization Mobile App
Oct 2013: Enhance and Deliver 29 Trainers
Jan 2015: Enhance and Deliver 53 Trainers
Mar 2016: Enhance for Collective Training
Oct 2018: Final Design for PoR Acquisition

Digital Training

In addition to the Husky-T system, ADM developed several digital HMDS training applications to further enhance the Warfighters' familiarization with the HMDS and recognition of threats. The apps were developed to be compatible with iOS, Android, and Windows architectures.

